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August 15, 1930

UNIVERSITY OF IOWA STUDIES

STUDIES IN CHARACTER

VOLUME III

NUMBER 1

THE ATTITUDES OF CHILDREN TOWARD LAW

by

EARL G. LOCKHART, Ph.D.

PUBLISHED BY THE UNIVERSITY, IOWA CITY, IOWA

Issued semi-monthly throughout the year. Entered at the post office at Iowa City, Iowa,
as second class matter under the Act of October 3, 1917

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UNIVERSITY OF IOWA STUDIES IN CHARACTER

EDWIN D. STARBUCK, Editor

FROM THE INSTITUTE OF CHARACTER RESEARCH

VOLUME III

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ACKNOWLEDGMENTS

The writer wishes to acknowledge his indebtedness to the following teachers, principals, and superintendents for their cheerful and wholehearted coöperation in the administration of approximately eleven thousand tests to the pupils of their respective schools: In Davenport, Iowa, Superintendent Frank Smart, Assistant Principal L. E. Keller of the Senior High School, Principal R. P. Redfield of the Young Junior High School, Principal F. J. Walker of the Lincoln School, and the teachers in these schools; in Washington, Iowa, to Superintendent J. H. Peet and the teachers under his supervision; to Superintendent C. B. Vernon of Marion and his teachers; and to Superintendent P. K. Cesander and his teachers at West Liberty.

He feels indebted also to the fifty lawyers for their ready coöperation in standardizing the answers to the questions of the test; also to fifty advanced graduate students in the University of Iowa.

However, it is Dr. Edwin D. Starbuck to whom the writer feels especially grateful. In his cheerful and courteous manner he has frequently and generously contributed with clear and accurate analyses of the complex problems involved in social attitudes; without the encouragement and inspiration of his leadership, an investigation of this type of problem would not have been undertaken.

E. G. L.

CONTENTS

Chapter	Page
ACKNOWLEDGMENTS	3
I INTRODUCTION	7
II THE PROBLEM DEFINED	8
What the Study Aims To Do	8
What the Study Does Not Aim To Do	8
Effect of Direct Teaching on Attitude	8
III ANALYSIS OF MOTIVES INVOLVED IN LAW BREAKING	10
Law as Convenience of Individual	10
The Law is "Always Right"	10
Law is for Safety and Convenience of the Public	10
Primary Motives Affecting Behavior of Children	12
IV PROCEDURE AND METHOD	13
The Test	13
Standardizing the Test	13
Reliability of Test as Used	15
Method and Procedure	15
Uses of Otis Self-Administered Tests of Mental Ability	16
Sims Score Card for Socio-Economic Status	16
Scoring Law Attitude Test	16
Retesting After Direct Teaching of Attitude Toward Law	17
V PRESENTATION AND TREATMENT OF DATA	18
Reaction to the Test by Adults	18
Influence of Sex	23
Influence of Grade Level	24
Influence of Socio-Economic Status	33
Influence of Direct Teaching	35
VI SUMMARY AND CONCLUSION	36
BIBLIOGRAPHY	38
APPENDICES	39
Appendix A—Law Attitude Test	39
Appendix B—Reasons for Some of Our Laws	45
Appendix C—Letter to Lawyers	46
Appendix D—Otis Self-Administering Tests of Mental Ability	47
Appendix E—Sims Score Card for Socio-Economic Status	59

LIST OF TABLES

Table	Page
1 Agreement of Lawyers on Answers to Test	18
2 Agreement of Graduates on Answers to Test	20
3 Agreement of Civic Club on Answers to Test	21

Table		Page
4	Agreement and Comparison of Three Groups	22
5	Mean Scores, Standard Deviation, Probable Error, Mean Difference and Probable Error Difference for Boys and Girls of All Grades	23
6	Comparison of Mean Scores of a Random Sample of 400 Cases of Boys and Girls from Grades Four to Nine	24
7	Mean Scores, Standard Deviation, and Probable Error of Grades Four to Twelve and of the Lawyers	25
8	Comparison of Grade 4 with Each of the Other Grades	25
9	Comparison of Grade 5 with Each of the Other Grades	26
10	Comparison of Grade 6 with Each of the Other Grades	26
11	Comparison of Grade 7 with Each of the Other Grades	26
12	Comparison of Grade 8 with Each of the Other Grades	27
13	Comparison of Grade 9 with Grades 10, 11, and 12	27
14	Comparison of Grade 10 with Grades 11 and 12	27
15	Comparison of Grade 11 with Grade 12	27
16	Mean Difference and Probable Error of Difference Between Scores of Grades 4-12	28
17	Mean Difference and Probable Error of Difference Between Scores of Graduates and Those of Grades 4-12	28
18	Mean Difference and Probable Error of Difference Between Scores of Civic Club and Those of Grades 4-12	29
19	A Comparison of Mean Scores and Standard Deviations of Adult Groups with Those of Grades 10-12	29
20	Comparison of the Mean Scores of Students of the Various Intelli- gence Levels in Grades 4-12	30
21	Correlation of Intelligence and Scores on Law Attitudes in Grades 4, 6, 8, 10, and 12	31
22	Comparison of the Differences of the Mean Scores of Higher Intelli- gence Levels with Those of the Lowest Level	31
23	A Comparison of the Mean Scores of Students of the Various Socio- Economic Levels in Grades 4-8	34
24	A Comparison of the Mean Scores of Students of the Various Socio- Economic Levels in Grades 9-12	34
25	Mean Scores, Standard Deviation, and Medians for Grades 4, 5, and 6	35
26	A Comparison of the Mean Scores Made in Civics Classes Before and After Direct Teaching on Attitude Toward Law	35

LIST OF DIAGRAMS

Diagram		Page
I	Graph Illustrating the Influence of the Intelligence Factor in Grades 4-8	32
II	Graph Illustrating the Influence of the Intelligence Factor in Grades 9-12	33

CHAPTER I

INTRODUCTION

During the past ten years there has been a great deal of pessimistic speculation as to the trend of our so-called revolting youth. The press and the pulpit have decried the increasing number of young men and women involved in crime and have pointed to the apparent "lawless attitude" on the part of the children.

It has seemed obvious to most observers of youth that they do not have the reverence for many of our traditions that we had when we adults were children. It occurred to the writer that an investigation of some of the attitudes characteristic of "modern youth" would be interesting and perhaps fruitful from the standpoint of pedagogy and character training. The attitudes of people toward moral and civic standards change from generation to generation. This is best, otherwise progress would be impossible. It is not profitable, therefore, to attempt to evaluate the attitudes of youth today in terms of the attitude of the youth of a generation ago.

If, however, we can compare important attitudes toward certain social standards held by children today with the attitudes which for the present we adults regard as ideal, the findings may have significance.

In studying attitudes we are studying a variable—something that changes not only from generation to generation, but from day to day. The change is general in all fields of human interest. The scientist has recently revised his attitude completely toward the nature of matter, the statesman toward what constitutes patriotism, and the theologian toward the reality of the absolute.

There are conflicting views in all fields of thought; conflicting influences are thus brought to bear in the formation of attitudes in children. The factor of variability of attitude due to mood we have sought to eliminate by using a large number of cases, thirty-five hundred children being tested.

The present study is confined to the investigation of attitude toward law, which may be complex attitude within a group of complex attitudes that go to make up the personality.

CHAPTER II

THE PROBLEM DEFINED

This study undertakes:

1. To determine the attitude children have regarding law when the situations are such as to supply a motive for disobedience.
2. To determine upon some standard attitude toward law in the specific situations used.
3. To ascertain what changes occur in these attitudes as the child advances from the fourth grade of the public school on through the high school.
4. To ascertain to what extent the factor of intelligence operates in affecting attitude toward law.
5. To determine what influence is exerted by the socio-economic status of the home on the attitude toward law.
6. To ascertain the influence sex may have on attitude toward law.

The problem involved the selection of:

- a. Mental tests of the group form suitable for all the grades from four to twelve;
- b. The selection of a suitable standard group form test to measure the socio-economic status of the home background;
- c. The creation of a special test to measure the attitude of children toward law;
- d. Securing representative groups of children available for testing.

Perhaps a few statements concerning what this problem is *not* may aid in making clear what the writer has undertaken. While administering the test on law attitudes the question was frequently asked, "But will the pupil who makes a high score in the test always obey the law?", or "Will the boy or girl who makes a low test be lawless in his behavior?" It is not within the scope of this study to ascertain to what extent these attitudes may be carried over into overt behavior. An attitude is a potential act, but it may never pass over into behavior because of inhibiting factors. How strong these inhibitions are and under what circumstances they will give way must be uncovered by additional investigation.

It is not of primary interest in this study to investigate the causal relations between intelligence and law attitude nor the effect of socio-economic conditions. However, these factors have been considered, and their apparent significance noted.

During this investigation a number of incidents occurred which suggested the importance of information as a factor in law attitude. The writer, therefore, decided to test the effect of direct teaching on attitude. The results of this experimental investigation are also reported.

CHAPTER III

ANALYSIS OF MOTIVES INVOLVED IN LAW BREAKING

The laws selected for the basis of this test have been made to operate in situations where there are motives for disobeying them or in situations where obedience involves a sacrifice. Usually laws may be obeyed without any sort of sacrifice, in which cases only thoughtless and vicious people break them, but frequently obedience to law involves a sacrifice and the motive to break the law is so strong that few can resist it.

In the preliminary part of this study, the test was given to about 200 adults. Many of these adults supplemented their answers to the questions of the test with lengthy comments. A careful reading of these comments revealed opposite and extreme view-points relative to law obedience.

One group, fortunately small in number, regards law as an arrangement for the convenience of the individual; this view-point would justify law breaking for convenience. The opposite view-point holds that law must always be obeyed and that it is always wrong to break it.

Related to the first group is a third who looks upon law as an instrument created for the "safety and convenience of the public." This group split, one part keeping in mind the safety and convenience of the public in general, and the other part regarding the convenience of the individual in lieu of the safety and convenience of the general public.

Many lawyers taking the test returned answers with considerable comment. The letters here included serve as typical examples.

Dear Sir:

I am in receipt of your letter of the 12th inst enclosing a copy of your law attitude test.

In answering these questions in the test the correct answer, of course, should be that it is wrong to violate the law and right to obey it, and that violators of the law should be punished, and those obeying it should be respected. Any answer that corresponds with the above statement is correct.

The question whether these laws are good or otherwise is probably too

deep for children to answer intelligently, but whether or not the law is proper should have no bearing on the attitude of the individual towards the law.

Very truly,

Dear Sir:

Herewith please find form for "Law Attitude Test" which I have filled out in compliance with your recent request.

I do not know that it will add anything to the usefulness of the test, but nevertheless, I should like to explain and in a measure qualify some of the answers I have made. This, I realize is an advantage that the school child does not have.

Question No. 1 of No. 3, part 1, I have answered no for the reason that I do not consider it inherently wrong to drive a car at any particular speed providing the driving is done with due regard to all conditions which for the purpose of this question I have assumed the farmer did. Speed laws, of course, are for the protection of the public generally, and it would have been wrong for the farmer to have driven at any speed which would endanger the safety of others. . . .

Question No. 3 of No. 5, part 2, I have answered no upon the broad ground that I am not favorable to the inclusion of such a law (prohibition law) in our constitution. . . My thought is that the country was making fine and, all things considered, rapid progress toward becoming a temperate nation voluntarily and that the prohibition amendment has in a large measure prevented further progress along this line. . . .

The foregoing explanation may be more revealing than the simple marking of the questions.

I should be glad to have a report of the outstanding results of your investigation.

Yours very truly,

These two opposite positions taken by prominent lawyers represent typical adult viewpoints; the first would have law obeyed under all circumstances and in all situations; the latter would regard law breaking in the light of circumstances, motives, and effects.

Dear Sir:

Enclosed is Questionnaire sent me. I have not signed my name on any part of it, but have no objection to your doing so. I, of course, would like to be permitted to explain some of my answers, however, there is no space left for explanation, and no doubt, this is omitted on justification.

I shall be pleased to hear from you later on as to the reports that you received from the lawyers, and also as to the reports that the different school children have sent in.

Very truly yours,

In preparing the test on law attitude the writer has endeavored to include the primary motives that affect the behavior of children. They are as follows:

1. Disobedience to law to gain material wealth.
2. Disobedience to law to gain or keep friends.
3. Disobedience to law to improve living conditions of one's own family.
4. Disobedience to law to save the life of a member of one's own family.

The motive to break a law was purposely made so strong by some of the situations that many felt that there was justification in disobedience.

In order to constitute a test, a motive was supplied by the situations for disobeying each law included. The child taking the test faced a conflict of interests, the personal advantage of the individuals involved on the one hand, and the loyalty to standards of law obedience on the other.

All situations used are natural and real, except where names of people have been changed or omitted.

Perhaps there are many more laws that should be included or those used should be given settings in other situations. However, to test the attitude of a child, one should select laws and situations toward which the child has an attitude other than that created by the situations of the test, except in the case of those few individuals to whom law as such is supreme and to be obeyed at all cost.

To the normal individual self-interest is strong and the extent to which he is willing to disregard personal advantage may well be taken as a measure of his loyalty to ideals.

CHAPTER IV

PROCEDURE AND METHOD

THE TEST

To form the basis of the test, twenty laws were selected that are more or less familiar to children and that operate within the field of the child's interest. Each of these twenty laws was placed in a situation where it was broken or in a situation where it was obeyed. Sixty questions were used, three on each situation. In answering these questions the child expressed his attitude toward the behavior of the people who obeyed or disobeyed the law in the specific situation. His attitude toward the law is inferred from the answers to these questions.

The motives for breaking the laws (ten of the laws were broken) were graded from the strongest, namely, the saving of the life of members of one's own family, to no motive at all. Likewise in the ten laws that were obeyed, the motive to disobey varied. One question of each group of three was concerning the value of the law itself such as, "Do you think we need this law?", "Do you think this is a good law?", "Do you like this law?"

In building the test special care was taken to avoid the use of such words as "Hallowe'en" that would have undue weight with certain groups.

STANDARDIZING THE TEST

One of the most difficult phases of this problem has been to determine just what attitude one should hold toward obedience or disobedience to the law in the given situation. Who could tell what attitude toward any of these laws operating in the specific situations is right?

There is a vagueness in the meaning of "right attitude" and "wrong attitude" which became apparent when expert opinion was sought on some of the test situations. The opinions were so conflicting that it was decided to abandon the effort to establish a standard of absolute right or wrong, and proceed on a basis of comparison of attitudes in which the reactions of the children were compared to those of educated adults. To this end we sought a

group, learned in the law and its application, and possessing a reputation for high moral character.

Fortunately, we were permitted indirect access to Martindale's American Law Directory, 1929 issue. This Directory has been published annually since 1868, and gives the rating of all lawyers in the United States. It is published by Martindale's American Law Directory (Inc.), Park-Murry Building, 9-15 Park Place, New York. The volume is revised every year and frequent supplements are issued. This volume is not accessible to the general public.

In this Directory all lawyers are rated on legal ability and on moral character. Legal ability is based on (a) age, (b) practical experience, and (c) class of practice.

"Reports are obtained through various channels which are believed to reflect reliable opinion." Lawyers are classified on ability as "A", "B", "C", "D", and "E".

To qualify as "A", he must be rated "very high", and must have practiced eight to ten years (ten years in cities); "B" is high, "C" is fair, "D" is medium; "E" is declined a rating.

Moral character rating is based on reports and investigations held in confidence. The classes are as follows: "V"—very high, "W"—high, "X"—fair, "Y"—medium, "Z"—declined a rating. Among the items that lower moral character rating are the following:

a. Complaint that he has withheld client's money; b. that he has been arrested, charged with crime, or misdemeanor; c. not recommended for credit, etc.

Through the coöperation of local lawyers we secured the names of fifty lawyers in the state of Iowa of the highest rating in ability and moral character. They were so selected as to be well distributed over the state. To each of these fifty "AV" lawyers was mailed a copy of the Law Attitude Test, with a request that he run through the test and answer all questions, thus indicating the attitude he thought desirable in all cases. (See letter to lawyers in the Appendix).

Of the fifty lawyers originally selected two were deceased, and two refused to answer by yes or no; for these four, substitutions were made, and thus we secured the replies to the sixty questions of the test by fifty lawyers of highest rating in Iowa. These lawyers were well distributed over the state, and it is believed they represent the superior members of the legal profession.

Eighty or more per cent of the lawyers answered fifty-one of the sixty questions the same. These fifty-one answers were taken as a convenient measure of attitude toward these laws in the situations in which they are involved. The fifty-one questions became the test; the remaining nine questions were disregarded since the agreement of the lawyers on each was less than eighty per cent.

If a pupil answered each of the fifty-one questions just as the lawyers answered it, he was given a score of fifty-one; that is, a perfect score. If an answer was opposed to the answer given by eighty per cent of the lawyers, it was scored as incorrect.

As an interesting sidelight on the reaction of adults, the test was also given to fifty of the most advanced graduate students in the University of Iowa in attendance during the winter of 1928-1929. The following plan was used in selecting this group: The heads of five departments were asked to furnish the names of ten of their best graduate students; this gave us fifty students, about forty of whom had acquired a Master's degree and were well along toward the Doctor's degree. Nearly all had taught many years in the public schools.

This group reacted very similarly to the lawyers; eighty per cent or more agreed on fifty-two of the sixty, but were unanimous on a less number of the questions than were the lawyers.

The two groups agreed on forty-nine of the sixty questions.

RELIABILITY OF TEST AS USED

To determine the reliability of the test on Law Attitude 100 cases were selected at random and their scores made on chance halves were correlated—the twenty-six odd questions against the twenty-five even questions of the test. It showed a reliability of $.837 \pm .0199$, after applying the Spearman-Brown formula (See Appendix for tests).

DETAIL PROCEDURE

The test was prepared as explained in the previous chapter and submitted to the lawyers in the exact form in which it was given to the children.

On nine of the questions less than eighty per cent of the lawyers agreed (exact percentages of total is shown in the chapter on results). These questions were retained in the test given to the children but answers to these nine were disregarded in counting up the scores.

In order to get reactions from representative groups, the writer endeavored to include (1) a rural school, (2) a typical Iowa county-seat town, (3) a suburban population, and (4) a city population. Accordingly the following localities were selected: West Liberty, Washington, Marion, and Davenport. In the city of Davenport we selected the Lincoln graded school which is situated within the labor or industrial area of the city; the Grant graded school, situated in the well-to-do resident district; the Young Junior High School, which represents a cross section of the city; the entire graduation class of about 200 in the Senior High School, and about 200 in each of grades ten and eleven.

Pupils in grades four to twelve inclusive were given the test. All children in these grades at West Liberty, Washington, and Marion were included and approximately 1650 in the city of Davenport, making a total of about 3500.

All the children were given Form A of the Otis Self-Administering tests of Mental Ability. The Intermediate Examination was given in grades four to nine. The Higher Examination was given in grades ten to twelve. The Sims Score Card for Socio-Economic Status (Form C) was used in the survey of home and social background. All the tests were administered by the writer or directly supervised by him or by one trained in testing. Every attempt was made to keep testing conditions constant.

It is possible that a few children failed to take the tests seriously. However, less than ten in the total of 3500 showed that they were averse to taking the tests; these few refused to answer the questions on the Sims Score Card on the ground that they were "too personal". Several others expressed the same feeling about this particular test; nevertheless, they answered all the questions. We have no way of knowing to what extent the true Socio-Economic status is revealed by this test; that there were some mis-statements was made obvious by a comparison of the score cards of siblings.

In general, however, the test gives a reasonably fair picture of the socio-economic background.

In scoring the test on Law Attitude, answers given by pupils were marked correct if they were the same as those given by eighty per cent of the lawyers. Answers that were opposed by at least eighty per cent of the lawyers, were marked incorrect. Answers to questions on which at least eighty per cent of the lawyers did not agree were disregarded in scoring. In all cases, questions

omitted were marked incorrect, provided that no more than three questions were omitted, in which latter case the paper was regarded as incomplete and was thrown out.

As an additional sidelight the test was given also to fifty members of a Kiwanis Club in a small Iowa city. The President of this Club volunteered their coöperation.

The papers of all adults including the lawyers were scored on the fifty-one questions, established by the agreement of eighty per cent or more of the lawyers. The mean scores and the standard deviation were then obtained on all adult groups and were used to compare with scores made by the children. As stated, all these tests were administered to the children in a uniform manner. Printed directions were followed in giving the two supplementary tests.

The special law attitude test was given with brief comment similar to the following: "Read each law; read the story or situation, and answer every question according to your honest opinion." The children were given plenty of time to finish, but were asked not to communicate.

Both the teachers and pupils took unusual interest in the test and later showed zeal in defending their answers, which leads the writer to believe the test was taken seriously.

All tests were given to children during the latter part of April and the first half of May, 1929.

Somewhat as an afterthought, the writer undertook to determine experimentally the effect of teaching on attitude toward law. The test was given in the usual way to about 100 pupils of the Junior High School in Iowa City. About one week later, a mimeographed sheet was given each pupil setting out reasons for the laws of the test without referring directly to the test. (See copy of this instructional sheet in the appendix). Two or three days later, these pupils were given the original test a second time. The results are presented as indicating the effect of teaching.

This brief part is not to be taken as conclusive. The writer does not wish it to be regarded as a fundamental part of the thesis; it furnishes some sidelights on the problem and may be regarded as suggestions for improvement of attitude.

CHAPTER V

PRESENTATION AND TREATMENT OF DATA

The data gathered in this study will be presented and considered in the following order:

1. Reaction to the test by adults
 - (a) Lawyers
 - (b) Graduate Students
 - (c) A Civic Club
2. The influence of sex
3. The influence of the grade level
4. The influence of intelligence
5. The influence of the socio-economic status
6. The influence of direct teaching

It is almost impossible to avoid a preconceived notion as to the results of a study of this kind. In the treatment of these data the writer has done his utmost to reduce to a minimum the influence of his own attitude. He has recognized and feared an unconscious tendency that might exist to select and arrange data with a view to establishing expected results and has, therefore, studiously sought to apply standard statistical methods impartially to all his material in order to show fairly, and as conclusively as possible, how the child's attitude at the several grade levels compares with the attitude of adults. In ascertaining the influence of sex, intelligence, and socio-economic status, all data have been impartially presented.

Before examining the table on these data of the school children, we should perhaps look more critically into the reactions of the three adult groups. The first three tables show for the lawyers, the graduate students, and the members of the civic club, the percentage of agreement on each item of the test.

An examination of the answers of lawyers to the questions of the test shows that only seven of the twenty laws were held to be desirable by all the lawyers. Only three of the laws were regarded as desirable by all the graduate group, while but two were so held by the Kiwanis group. The three prohibition laws of the test were opposed by 20 per cent, 16 per cent, and 10 per cent respectively of the lawyers, and by 10 per cent, 8 per cent, and 8 per cent respectively of the graduate group.

The forty mile per hour auto speed law was opposed by 36 per cent of the lawyers, by 12 per cent of the graduates, and by 40 per cent of the Kiwanis Club. In part II of the test, law No. 3, the hunting law, was endorsed by 100 per cent of the lawyers and by 100 per cent of the graduate group, yet 40 per cent of the former group and 62 per cent of the latter group did not respect a certain Mr. Brown for refusing to disobey the law.

These items from Table 1 and Table 2 make it clear that a large per cent in each of these groups believe a law may be good, and yet may be disobeyed with impunity.

Table 1

This table shows how the lawyers agreed on answers to questions. Read the table as follows: Part I, law 1, question 1, was answered yes by 82 per cent of the lawyers, and no by 18 per cent, etc.

Question	PART I		PART II	
	Per cent Yes	Per cent No	Per cent Yes	Per cent No
		No. 1		No. 1
1	82	18	100	0
2	96	4	98	0
3	90	10	0	100
		No. 2		No. 2
1	98	2	94	6
2	100	0	96	4
3	94	6	94	4
		No. 3		No. 3
1	40	60	64	32
2	64	36	100	0
3	16	84	60	40
		No. 4		No. 4
1	98	2	98	2
2	90	10	94	4
3	70	30	80	20
		No. 5		No. 5
1	100	0	96	4
2	100	0	80	20
3	98	2	80	20
		No. 6		No. 6
1	100	0	100	0
2	100	0	100	0
3	90	10	98	0
		No. 7		No. 7
1	100	0	98	2
2	84	16	80	10
3	88	12	100	0

IOWA STUDIES IN CHARACTER

Table 1 (Continued)

Question	PART I		PART II	
	Per cent	Per cent	Per cent	Per cent
	Yes	No	Yes	No
		No. 8		No. 8
1	96	4	100	0
2	96	4	96	4
3	90	10	86	8
		No. 9		No. 9
1	100	0	78	22
2	96	4	96	4
3	74	26	54	38
		No. 10		No. 10
1	98	2	100	0
2	82	18	74	24
3	100	0	98	0

Table 2

This table shows how the graduates agreed on answers to questions.

Question	PART I		PART II	
	Per cent	Per cent	Per cent	Per cent
	Yes	No	Yes	No
		No. 1		No. 1
1	90	10	100	0
2	96	4	100	0
3	86	12	8	92
		No. 2		No. 2
1	98	2	92	8
2	96	4	98	2
3	88	12	100	0
		No. 3		No. 3
1	20	80	38	60
2	82	12	100	0
3	14	86	36	62
		No. 4		No. 4
1	98	0	98	2
2	98	0	96	2
3	84	12	94	6
		No. 5		No. 5
1	100	0	92	6
2	100	0	92	8
3	96	4	84	12
		No. 6		No. 6
1	78	22	92	6
2	96	4	98	0
3	72	28	88	10

Table 2 (Continued)

Question	PART I		PART II	
	Per cent Yes	Per cent No	Per cent Yes	Per cent No
		No. 7		No. 7
1	100	0	100	0
2	92	8	90	10
3	92	8	100	0
		No. 8		No. 8
1	98	2	94	6
2	94	4	98	2
3	92	8	88	12
		No. 9		No. 9
1	94	4	66	30
2	70	30	90	6
3	36	60	56	38
		No. 10		No. 10
1	90	10	96	4
2	92	8	80	16
3	98	2	96	4

Table 3

This table shows how the Civic Club agreed on answers to questions.

Question	PART I		PART II	
	Per cent Yes	Per cent No	Per cent Yes	Per cent No
		No. 1		No. 1
1	62	36	96	4
2	84	16	90	6
3	40	20	24	72
		No. 2		No. 2
1	100	0	90	8
2	94	6	86	12
3	94	6	86	8
		No. 3		No. 3
1	40	60	68	32
2	64	40	86	12
3	22	76	52	40
		No. 4		No. 4
1	96	4	96	2
2	88	12	94	2
3	70	28	88	6
		No. 5		No. 5
1	100	0	94	6
2	100	0	70	28
3	96	4	74	14

Table 3 (Continued)

Question	PART I		PART II	
	Per cent	Per cent	Per cent	Per cent
	Yes	No	Yes	No
		No. 6		No. 6
1	94	6	100	0
2	96	4	100	0
3	84	16	92	0
		No. 7		No. 7
1	98	2	96	2
2	74	26	76	22
3	94	4	90	2
		No. 8		No. 8
1	92	8	92	6
2	86	10	94	6
3	90	10	72	22
		No. 9		No. 9
1	92	8	60	38
2	80	18	82	14
3	54	44	50	46
		No. 10		No. 10
1	96	4	88	8
2	82	18	72	26
3	96	2	94	4

Table 4

This table shows the agreement and comparison within the three groups: Lawyers, Graduate Students, Civic Club.

Lawyers

100%	agree	on	16	questions	out	of	60
90%	"	"	41	"	"	"	60
80%	"	"	51	"	"	"	60
70%	"	"	55	"	"	"	60

Graduate Students

100%	agree	on	9	questions	out	of	60
90%	"	"	42	"	"	"	60
80%	"	"	52	"	"	"	60
70%	"	"	55	"	"	"	60

Civic Club

100%	agree	on	5	questions	out	of	60
90%	"	"	30	"	"	"	60
80%	"	"	42	"	"	"	60
70%	"	"	51	"	"	"	60

THE INFLUENCE OF SEX

This investigation shows that sex has but little influence on attitude toward law.

Tables 5 and 6 show where the difference appears and how significant it is. Table 5 shows the number of boys and the number of girls in each of the nine grades tested. They have been treated separately by grades. For each group in each grade are given the mean scores, the SD(dis), the PE(av), the mean difference, and the PE(dif).

It will be noticed that the boys make a higher score than the girls in grade 5 by a mean difference of 1.33, which, however, is less than four times the probable error of the difference.

The difference is negligible in all other grades except eleven and twelve. Here it is small, but the significance is in favor of the girls. In grade eleven the mean difference of 1.15 is 4.6 times PE(dif), and in grade twelve the mean difference of 1.59 is 5.4 times the PE of the difference.

Table 5

This table shows mean scores, SD, PE(av), mean difference, and PE(dif) for boys and girls of all grades.

Grade	No. Cases	Sex	Mean Score	SD	PE(av)	Mean Dif.	PE(dif)
4	125	Boys	44.07	5.40	.325		
	121	Girls	44.09	5.19	.318	.02	.454
5	147	Boys	46.006	4.81	.367		
	147	Girls	44.67	5.41	.301	1.33	.402
6	120	Boys	46.31	4.34	.276		
	141	Girls	47.07	3.20	.182	.76	.327
7	142	Boys	45.43	3.56	.209		
	180	Girls	45.79	4.87	.245	.36	.322
8	161	Boys	46.87	3.83	.203		
	176	Girls	46.90	3.25	.165	.03	.262
9	206	Boys	46.71	3.93	.184		
	186	Girls	46.34	4.53	.224	.37	.290
10	146	Boys	46.71	4.17	.233		
	177	Girls	47.58	3.26	.165	.87	.258
11	180	Boys	46.68	3.89	.191		
	209	Girls	47.83	3.15	.147	1.15*	.241
12	134	Boys	45.14	4.68	.229		
	190	Girls	46.73	3.77	.184	1.59*	.293

*Significant difference in favor of the girls.

Table 6 shows the result of a comparison of two random selections of boys and girls from grades four to nine. Two hundred cases in each group were selected. The difference in the mean scores is but .35, while the probable error of the difference is .287.

So far as our technique is adequate to reveal it, no difference exists between the attitude of boys and the attitude of girls toward law in grades four to nine, though in grades eleven and twelve the girls show the better attitude.

For additional comparison of scores made by boys and girls, two hundred cases were selected from each group at random in grades four to nine, an equal number being taken from each grade.

Table 6

This table shows a comparison of 200 random samples of boys and girls from grades four to nine.

Grade	No. Cases	Mean Score	Mean Dif.	SD	PE(av)	PE(dif)
Boys	200	46.15	.35	4.04	.193	.287
Girls	200	45.80		4.48	.213	

These results indicate that sex makes no difference in scores made by the children in the grades four to nine inclusive. The difference in the means of the two distributions is but 1.56 times the probable error of the difference, which signifies that in only 85 chances in 100 would the difference be greater than zero.

INFLUENCE OF GRADE LEVEL ON ATTITUDE TOWARD LAW

Coming now to the heart of our problem we ask, "What change takes place in the attitude of the child as he advances through the school system? Does he approach more nearly to the attitude held by adults, or does he drift farther from their standard?"

"If a change occurs, in which grade is it most marked?" These questions appear to be important. If we should find a period in the child's experience when his attitudes change rapidly in relation to the attitude of adults, we should be in a position to search more effectively for the causes of the change. If the child's attitude toward law should be nearer the adult's attitude while he is in the lower grades than when he completes the high school, it would be natural to infer that the school or the environment he had while in school is responsible. It would not follow, however, that the school activities brought about the change, because home influences and other social factors operate with varying degrees of effect as the child develops in age and experience; nevertheless, knowing the grade and age level when such a change becomes most rapid

would enable us to focalize attention on a definite portion of the environmental influences.

Table 7 shows the mean score, the standard deviation, and the probable error of the mean for each of the grades four to nine. It will be noted that the mean score tends from grade to grade to approach the mean score made by the lawyers. At no place does there appear to be a sudden and marked change. The table indicates that the child tends gradually to approach the attitude held by the lawyers as he advances through the school.

Table 7

This table shows the mean scores, the SD(dis) and the PE(av) of all grades, four to twelve, with the mean and SD of the lawyers.

Grade	Mean	SD	PE(av)
4	44.07	5.38	.2314
5	45.33	5.55	.2183
6	46.72	4.07	.169
7	45.69	4.80	.180
8	46.88	3.71	.137
9	46.53	4.30	.146
10	47.18	3.67	.137
11	47.29	4.83	.165
12	46.08	4.26	.159
Lawyers	48.08	2.76	.263

Detail Grade by Grade Comparison

By a series of tables*, we have shown in detail, a grade to grade comparison. Each of the grades, four to twelve, has been compared with each of the other grades. It will be observed that though there is, quite consistently, a mean difference in favor of the higher grades which is frequently significant, this difference is always small.

Table 8

This table shows a comparison of grade 4 with grades 5, 6, 7, 8, 9, 10, 11, and 12.

Grade	Mean Difference**	PE(dif)
5	1.26	.316
6	2.65	.287
7	1.62	.298
8	2.88	.268
9	2.46	.273
10	2.46	.269
11	3.28	.284
12	2.01	.280

*Tables 8 to 15.

**Mean score of grade four has been subtracted from the mean score of each of the other grades, to obtain the mean difference.

The mean score of grade 4 is less than the mean score of each of the other grades and is indicated by the mean difference. The difference, though small, is significant in all cases except grade five.

Table 9

This table shows the comparison of grade 5 with grades 6, 7, 8, 9, 10, 11, and 12.

Grade	Mean Difference	PE(dif)
6	1.39	.276
7	1.36	.288
8	0.55	.257
9	1.20	.262
10	1.85	.257
11	1.96	.273
12	0.73	.270

Grade 5 has a lower mean score than any grade higher. The difference is significant only in comparison with grades 6, 7, 9, 10, and 11. As in Table 8 this difference is small.

Table 10

In this table grade 6 is compared with grades 7, 8, 9, 10, 11, and 12.

Grade	Mean Difference	PE(dif)
7	1.03 (G)*	.254
8	.16 (L)**	.218
9	.19 (G)	.224
10	.46 (L)	.218
11	.57 (L)	.236
12	.64 (G)	.233

*G, signifies that the mean score of grade 6 is greater than the mean score of grades 7, 9, and 12.

**L, mean score of 6 is less than that of 8, 10, and 11.

Table 11

In this table grade 7 is compared with grades 8, 9, 10, 11, and 12.

Grade	Mean Difference	PE(dif)
8	1.19	.233
9	.84	.239
10	1.49	.233
11	1.60	.251
12	.39	.247

The mean score of grade 7 is less than that of 8, 9, 10, 11, and 12. The difference is significant in the cases of grades 8, 10, and 11.

Table 12

In this table grade 8 is compared with grades 9, 10, 11, and 12.

Grade	Mean Difference	PE(dif)
9	.35 (G)	.200
10	.30 (L)	.193
11	.41 (L)	.214
12	.80 (G)	.210

The mean score of grade 8 is greater than grades 9 and twelve but less than grades 10 and 11. In no case is the difference as much as four times the PE of difference.

Table 13

In this table grade 9 is compared with grades 10, 11, and 12.

Grade	Mean Difference	PE(dif)
10	.35 (L)	.200
11	.76 (L)	.220
12	.45 (G)	.216

The mean score of grade 9 is less than that of 10, and 11, but greater than grade 12. Here is, however, no significant difference.

Table 14

In this table grade 10 is compared with grades 11 and 12.

Grade	Mean Difference	PE(dif)
11	.11 (L)	.214
12	1.10 (G)	.210

Mean score of grade 10 is less than that of grade 11 and more than that of grade 12. The difference between 10 and 12 is significant but small.

Table 15

In this table grade 11 is compared with grade 12.

Grade	Mean Difference	PE(dif)
12	1.21 (L)	.229

It will be seen that grade 11 has a mean score that is 1.21 points greater than the mean score of grade 12. This is significant, being 5.28 times the PE(dif). Allowing for the probable error of difference, here again the difference is slight.

LAWYERS COMPARED WITH CHILDREN BY GRADES

When we compare the score made by the lawyers with the scores made by the children in each grade, we find except in the case of

grade 4, that the mean difference is surprisingly small. The mean score of grades 10 and 11 is practically the same as the score made by the lawyers. Table 16 shows the mean differences and the PE(dif) for each grade in comparison with the lawyers.

Table 16

Lawyers are compared with grades 4, 5, 6, 7, 8, 9, 10, 11, and 12. (Mean difference was found by subtracting the mean score of each grade from the mean score made by the lawyers.)

Grade	Mean Difference	PE(dif)
4	4.01	.350
5	2.75	.342
6	1.36	.313
7	2.39	.324
8	1.20	.296
9	1.55	.301
10	.90	.296
11	.79	.310
12	2.00	.307

In every case the mean score of the lawyers is higher. The difference, however, is not significant in the cases of grade 10 and grade 11.

Table 17

In this table the grades are compared with the graduate students.

Grade	Mean Difference*	PE(dif)
4	3.51	.469
5	2.25	.458
6	.86	.435
7	1.89	.447
8	.70	.425
9	1.05	.433
10	.40	.425
11	.29	.436
12	1.50	.436

*The mean difference was found by subtracting the mean score of each grade from the mean score made by the graduate students.

It will be observed from this table that there is no significant difference between the scores made by the graduate students and those made by the pupils in grades 6, 8, 9, 10, 11, and 12, though there is a significant difference in the case of grades 4 and 5.

ATTITUDES OF CHILDREN TOWARD LAW

29

Table 18

The grades are here compared with the civic club.

Grade	Mean Difference	PE(dif)
4	1.65 (less than Club)	.392
5	.39 (less than Club)	.384
6	1.00 (greater than Club)	.359
7	.03 (less than Club)	.368
8	1.16 (greater than Club)	.344
9	.81 (greater than Club)	.348
10	1.46 (greater than Club)	.345
11	1.57 (greater than Club)	.365
12	.36 (greater than Club)	.354

It will be observed from Table 18 that the mean score made by grades 4, 5, and 7 are lower than the mean score made by the civic club. All other grades made higher scores. Grade 4 made a score that is lower than the score made by the club; while grades 10 and 11 made scores that are higher. There is no significant difference between the club and the other grades.

The terms lower and higher as here used, refer to scores only. By reference to Table 16 we may say that grades 10 and 11 approached more nearly the attitude expressed by the lawyers than did the civic club, while grade 4 was farther from the attitudes of the lawyers than was the club.

It should be remembered that this civic club represents a cross section of the business and professional population of a small city in Iowa. It is probable that this group is fairly representative of our average adult population.

Table 19

This table compares the mean scores of the three adult groups with those made by grades 10, 11, and 12.

Group	Number	Mean Score	SD(dis)
Lawyers	50	48.08	2.76
Graduates	50	47.58	4.27
Civic Club	50	45.73	3.48
Grade 10	323	47.18	3.67
Grade 11	389	47.29	4.83
Grade 12	324	46.08	4.26

Table 19 shows a comparison of the scores made by the three adult groups, lawyers, graduates, and the civic club, with the 10th, 11th, and 12th grades.

By comparison with Tables 16, 17, and 18 it will be seen that

there is no significant difference between the mean score of the lawyers, the graduate group, and the grades 10 and 11.

The small difference in the scores made by the adult groups and those made by the upper grades of the school is remarkable. The civic club made a score that is slightly lower than the score made by the other groups. It is clear that the school groups have a greater standard deviation, indicating that the attitude held by these is less uniform.

THE INFLUENCE OF THE INTELLIGENCE FACTOR

To measure the influence of intelligence on the attitude of children toward law, the entire group of children were divided on the basis of their I.Q. scores, making four classes in each grade. Those with an I.Q. of 90 or less were placed in class D, those with an I.Q. of 91 to 105 in class C, those between 106 and 120 in class B, and those above 120 in class A.

The mean score for each group was found and compared. It was found that a wide difference obtained between class D and class A in each of the lower grades and that this difference became less when we compared these classes in the higher grades. In grades 9 and 12 there was no difference in the mean score made by class D and class A.

It is probable that children with a low intelligence made a somewhat lower score through inability to comprehend the questions of the test.

We have no means of knowing to what extent the difference in scores made by the D and the A groups is due to mistakes through

Table 20

This table shows the mean score, by grades, of the group at each intelligence level.

Grade	D Mean	Intelligence Quotients			A Mean
		C Mean	B Mean		
4	40.83	43.70	45.90		47.57
5	42.39	43.62	46.36		48.28
6	43.24	46.56	47.87		48.68
7	44.32	45.64	46.04		47.77
8	44.65	47.06	47.48		48.13
9	45.99	46.71	46.88		45.58
10	46.06	46.94	47.87		46.75
11	46.37	46.88	47.63		48.37
12	45.55	45.92	46.37		45.14

poor comprehension. However, in the high school where none of the four groups would have comprehension difficulty, we found but slight difference in scores.

Table 20 exhibits the mean score for each class for all the grades. In order to check on the results shown in Table 20, it was decided to run a series of correlations between intelligence quotients and scores. One hundred cases were selected at random from each of the grades 4, 6, 8, 10, and 12. Table 21 shows the results of these correlations.

Table 21

This table shows the correlation between scores and intelligence for grades 4, 6, 8, 10, and 12.

Grade	Coefficient of Correlation	Probable Error
4	.451	.0538
6	.211	.0645
8	.178	.0653
10	.154	.0659
12	-.063	.0672

It will be observed that there is complete harmony between the picture shown in Table 20 and that in Table 21, although it is seen from two distinct angles.

The mean differences shown for Grade 4 in Table 20 are indicated in the positive correlations of .451 for this grade in Table 21. In

Table 22

This table is derived from Table 20 and shows the difference between scores of the lowest I.Q. level and each of the higher levels.

Grade	Intelligence Quotients			
	D Mean Score	C Dif.	B Dif.	A Dif.*
4	40.83	2.87	5.07	6.74
5	42.39	1.23	3.97	5.89
6	43.24	3.32	4.63	5.44
7	44.32	1.32	1.72	3.35
8	44.65	2.41	2.83	3.48
9	45.99	.72	.89	-.41
10	46.06	.88	1.81	.69
11	46.37	.51	.26	2.00
12	45.55	.37	.82	-.41

*These differences were obtained by subtracting the mean score of the lowest intelligence level from the mean score of each of the higher levels in each grade.

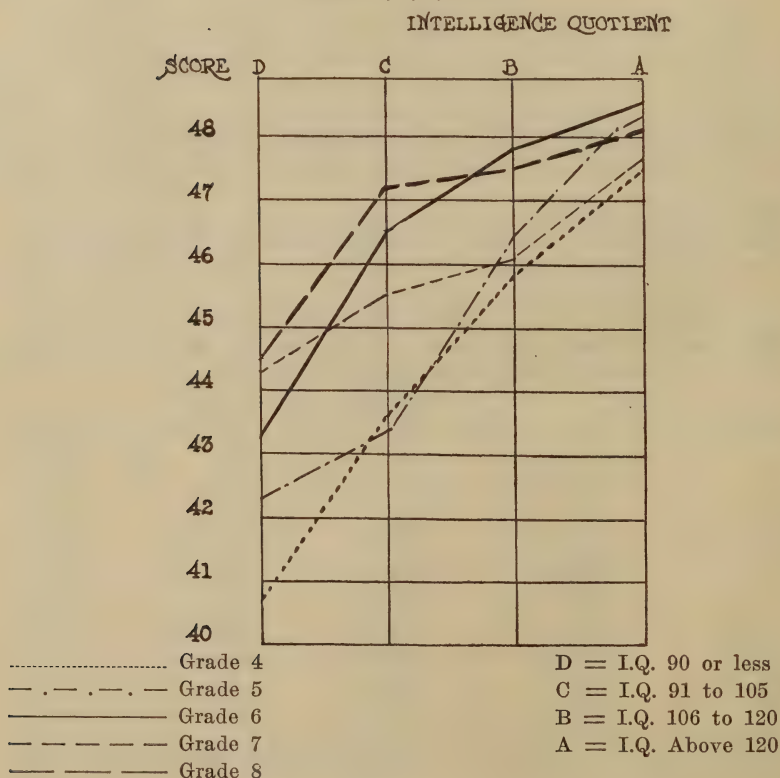
the upper grades according to both tables, intelligence does not appear to be a positive influence.

Table 22 exhibits the finding shown in Table 20 in such form as to indicate more clearly at each grade level the influence of intelligence. The mean score is given for the group with the lowest I.Q.'s, and the difference between this score and the mean score made at each intelligence level is indicated. This difference is shown for each of the nine grades.

If the number of cases were multiplied, it is obvious that intelligence would prove a factor in the attitude toward law. From the above table it appears that intelligence is a more important factor in the lower grades and decreases in importance as the pupil

DIAGRAM I

Graph Illustrating the Influence
of the Intelligence Factor as Shown in Table 20
Grades 4, 5, 6, 7 and 8



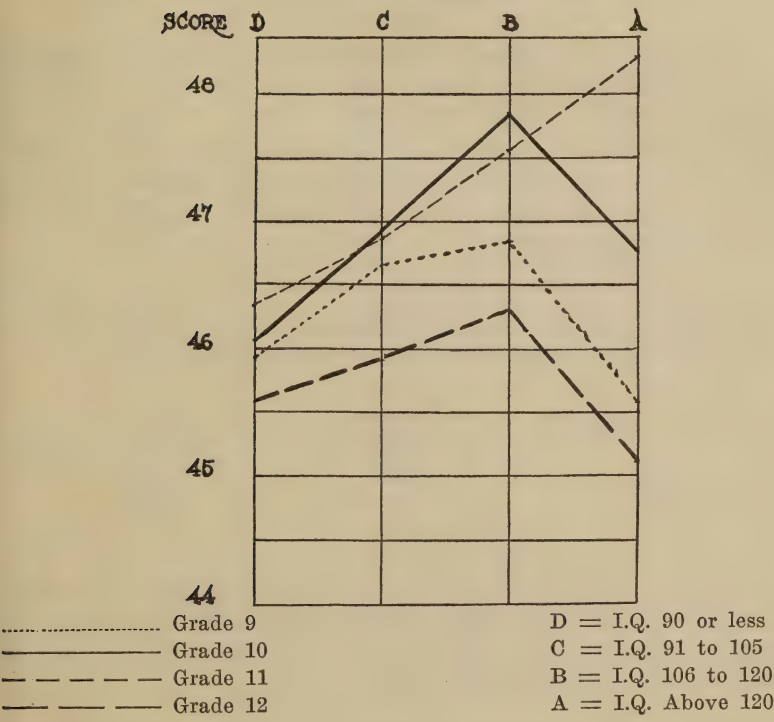
advances. In grades 9, 10, 11, and 12 it does not appear to be a factor at all.

In Diagrams 1 and 2 are shown graphic representations of the facts exhibited in the detail comparison tables above. It will be observed that the factor of intelligence appears to exert less influence in the higher grades.

DIAGRAM II

Graph Illustrating the Influence
of the Intelligence Factor as Shown in Table 20
Grades 9, 10, 11, and 12

INTELLIGENCE QUOTIENT



INFLUENCE OF SOCIO-ECONOMIC STATUS ON THE ATTITUDE

TOWARD LAW

To ascertain the effect of the socio-economic status of children on their attitude toward law, each of the grades from four to eight was classified into three groups, A, B, and C. The A group include those having a score above 24 on the Sims Score Card; the

B group those with a score of 13 to 24; the C group those with a score of 12 or less.

Table 23

This table shows the mean scores for groups A, B, and C in each of the grades 4, 5, 6, 7, and 8.

Grade	C Mean	B Mean	A Mean
4	44.34	43.74	45.73
5	44.13	45.53	46.61
6	45.88	46.65	47.41
7	46.28	45.53	46.63
8	46.41	47.21	47.57

When groups C and A are compared in the above table the socio-economic status appears to exert a positive influence on the attitude of children toward law in these grades.

In the high school, however, this influence does not seem to hold. We have compared the lowest with the highest groups at the high school level for the socio-economic influence on scores. Table 24 shows this comparison.

Table 24

This table shows the comparison of the mean scores of the lowest and highest socio-economic levels in grades 9, 10, 11, and 12.

Grade	C Mean	A Mean
9	45.86	47.17
10	47.07	47.58
11	48.62	47.24
12	48.50	46.64

It will be observed that the results of this comparison appear to be in contrast with those shown in Table 23. The scores for grades 11 and 12 are lower in the A group than in the C group. The difference, however, is small.

TWO SCHOOL SYSTEMS COMPARED FOR THE INFLUENCE OF SOCIO-ECONOMIC STATUS

It will be recalled that we arranged to test two graded schools within the city system, the Lincoln and the Grant; the former in the labor area where on the average the homes have a lower socio-economic status, the latter in a well-to-do resident part of the city where the socio-economic status is high.

It would seem that if the socio-economic status were a strong factor in the attitude children have toward law, it would stand out in relief here when we compared the mean scores grade for grade in these two schools. However, we find no significant difference in the mean scores when the schools are compared grade by grade. There is one difference that is worthy of note: the size of the standard deviation, the Lincoln school having a smaller SD for each grade. We have no data to explain the tendency of one of these schools to be more uniform in the attitude toward law than the other.* Table 25 presents the mean score, the median, and the standard deviation of grades 4, 5, and 6 in each of these schools.

Table 25

This table shows a comparison of the Lincoln and Grant schools.

Grade	Lincoln			Grant		
	Mean	SD	Median	Mean	SD	Median
4	44.36	4.76	46	44.53	5.86	46.50
5	44.49	4.28	47	45.02	5.65	46.00
6	47.31	2.84	48	47.24	3.87	48.00

*It should be noted that the teachers in the Lincoln School give special attention to training in proper behavior habits and in citizenship.

THE RESULT OF DIRECT TEACHING ON THE ATTITUDE OF CHILDREN (A civic class in the Iowa City Junior High School)

Table 26

This table shows scores, in per cent, made by pupils in the experimental group before and after teaching need of laws.

	Mean Score	SD(dis)	PE(dif)	Mean Dif.	PE(dif)
Before	86.42	1.79	.1224		
After	93.52	.974	.065	7.10	.138

As a result of one lesson unit of study on the need and value of laws*, the class made a score on the test which brought the mean up 7.1 per cent nearer the standard set by the lawyers.

*Six specific laws were discussed on the instruction unit used. See Appendix for copy.

CHAPTER VI

SUMMARY AND CONCLUSIONS

There has been wide-spread comment on the "lawless attitude" of children. Everywhere we have heard pessimistic speculations regarding the trend of "revolting youth". This prompted the writer to examine the literature on character education in search of some reliable study on the subject. Unable to find a scientific study that dealt with the specific problem of children's attitude toward law, he decided to undertake an original research on the problem. To accomplish this a special test was devised and its reliability established. It was given to fifty lawyers rated among the highest in ability and moral character. The reaction of these lawyers was taken as a convenient measure with which to compare the reactions of more than 3000 children. As a sidelight on the reaction of adults, the test was given to two other groups—fifty advanced graduate students, and a civic club.

Suitable tests of mental ability and a survey test of socioeconomic status were administered to see if intelligence or socioeconomic status appeared to influence attitude.

Scores made by boys on the law attitude test were compared with those made by girls at the same grade level, to reveal the influence of sex. A grade by grade comparison was made to reveal any difference due to scholastic attainment or grade level.

The intelligence range in each grade was divided into four sections and each child assigned to a section according to his I.Q. The mean scores of these sections were compared to determine the influence of intelligence. A similar procedure was employed to ascertain the influence of the socio-economic status.

CONCLUSIONS

1. Children gradually approach the adult attitude toward law (as measured by the test) as they advance through the grades. Children in grades 4, 5, and 6 are farther from the adult attitude than are those in the high school.

2. The attitudes of children toward law approach that of adults as the groups rise in the scale of intelligence; the fourth or lowest

group in the range of intelligence falls considerably below the first or highest group. However, this is not true of the higher grade levels.

3. The conclusion seems warranted that intelligence is a factor in determining attitude toward such laws and situations as are involved in the test, provided the mental age is low—eight years or less. As mental age increases the degree of intelligence appears to exert less influence. After the mental age of 14 or 15 years, such differences in degree of intelligence as occur in the school, appear to have no consistent influence on attitude except at the highest levels in grades 9, 10, and 12.

4. There are indications that children of high school age who rank in the highest level of intelligence, tend to draw away from the attitude held by adults. This group stubbornly persists in manifesting an attitude that does not conform to that of adults. It is the influence of this group in grade 12 that pulls down their mean score. The significance of this finding may be far reaching and worthy of exhaustive research.

5. Sex appears to have no influence of consequence on attitude toward law. In grades 11 and 12 the girls are shown to have an attitude slightly nearer that of adults than the boys. This difference is small but constant.

6. It appears from this study that socio-economic status is of no consequence in determining attitude toward law.

7. The outstanding conclusion is that children do not differ greatly from adults in their attitude toward law. The test locates individual cases that differ widely from the attitude expressed by mean scores but these cases appear to bear no relationship to age, grade level, intelligence or socio-economic status.

8. This study shows clearly that attitude toward law is approximately the same for children in all social and civic conditions whether in the rural community or a city environment, and is but slightly different from that of adults, whether lawyers, graduate students, or members of a civic club.

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APPENDIX A

LAW ATTITUDE TEST

Copyright 1929, E. G. Lockhart

Prepared by E. G. Lockhart under the Auspices of

Institute of Character Research

State University of Iowa

Iowa City, Iowa

Dr. Edwin D. Starbuck, Director

Name..... Age..... Sex..... Grade.....

Name (do not write here).....

Do not fill in below this line

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total

Score on odds.....

Score on evens.....

I.Q..... Teacher's Estimate.....%

To answer Yes, put an "X" after Yes. To answer No, put an "X" after No.

PART I

No. 1

There is a law in Iowa that fruit plants shall not be taken from one county to another without first having them inspected (examined) by a state inspector.

Robert Jones moved a load of fruit plants from Cedar county to his farm in Benton county without having them inspected.

1. Do you think this is a good law? Yes.... No....

2. Was it wrong for him to move the plants without having them inspected? Yes.... No....

3. Should Mr. Jones be arrested and punished for not having his plants inspected? Yes.... No....

No. 2

The law forbids the use of fish-traps, nets and seines in the rivers of this state.

Henry Lee, a fisherman, in order to pay his daughter's expenses in school, built a fish-trap in the river near his home. By means of the trap he could catch more fish and get more money to send his daughter to school.

1. Was it wrong for Mr. Lee to put the fish-trap in the river? Yes.... No....

2. Should we have a law against the use of fish-traps? Yes.... No....

3. Should this fisherman be arrested and punished? Yes.... No....

No. 3

The speed limit for automobiles in a certain state is 40 miles per hour.

A farmer living in that state is 8 miles from the town and has no telephone. His little son became very ill. The father drove his car 60 miles per hour into town after the doctor.

1. Was it wrong for this farmer to drive so fast? Yes.... No....
2. Is this speed law a good one? Yes.... No....
3. Should this farmer be arrested and punished for driving so fast? Yes.... No....

No. 4

A town in Iowa has a law against molesting (moving) property without the consent of the owner.

One night Lew Wheeler and another boy thought they would have some fun so they took a yard gate from a neighbor's fence and carried it down to the post office. Many boys liked to tease this old man.

1. Was it wrong for the boys to take the gate away? Yes.... No....
2. Do you think cities need such laws? Yes.... No....
3. Should these boys be arrested and punished? Yes.... No....

No. 5

It is against the law to forge a check (to sign another person's name to a check without his consent).

Jones saved the life of Smith during the World War. These two men have been close friends ever since. A few weeks ago, Jones was in trouble and came to Smith for help. He wanted Smith to loan him some money. Smith had no money and could borrow none so he forged a check and obtained money for his friend that way.

1. Was it wrong for Smith to forge this check? Yes.... No....
2. Should we have laws against forging checks? Yes.... No....
3. Should Smith be arrested and put in jail because of the way he got the money for his friend? Yes.... No....

No. 6

The law compels the sheriff and his deputies (men who help him) to arrest persons they find committing crime.

The bank at Plymouth was robbed. The robber had gone into the nearby woods. The sheriff came, selected ten deputies and began to hunt for the robber. Just at dark, Mr. Holt, one of the deputies came upon the man hiding in a hollow tree. The man was his friend and neighbor. The robber gave Mr. Holt the bank's money and begged him, for the sake of his wife and children, to let him go and not tell. The deputy let the robber go, took the money to the bank and said, "I found a bag of money in the woods but no trace of the robber".

1. Was it wrong for the deputy to let the robber go? Yes.... No....
2. Should the law compel a sheriff to arrest people if he does not want to do so? Yes.... No....
3. Should the deputy be arrested and punished for letting the man go? Yes.... No....

No. 7

We have a national law against importing liquor (bringing it into the United States).

Henry Hardy, who lived in northern Minnesota, had always been a hard drinker but he could no longer buy liquor in Minnesota, so he drove over into Canada and bought a quantity of liquor and brought it back to his farm in Minnesota.

1. Was it wrong for Mr. Hardy to bring the liquor in from Canada? Yes.... No....
2. Do you think we need this law? Yes.... No....
3. Do you think Mr. Hardy should be arrested and punished? Yes.... No....

No. 8

The Speed Limit in Iowa on the open road is 45 miles per hour.

Some boys and girls out "joy riding" were driving their car 70 miles per hour when they were overtaken by a speed officer.

1. Was it wrong to drive faster than 45 miles per hour? Yes.... No....
2. Should these boys and girls be arrested and punished for driving so fast? Yes.... No....
3. Do you think we should have speed laws? Yes.... No....

No. 9

The law (rule) of the army requires that every soldier must be discharged (excused) before leaving the army service.

An American soldier in the World War had fought in many hard battles and was tired of war. When he heard that the war was over, he started at once for England, not knowing that he must wait to be discharged. Later he was arrested and thrown into an American prison, as a deserter.

1. Is this rule of the army a good one? Yes.... No....
2. Was it wrong for this soldier to leave the army without being discharged? Yes.... No....
3. Should this soldier have been arrested and thrown into prison as a deserter? Yes.... No....

No. 10

It is against the rule of the school to play truant, that is start to school and go somewhere else without the parents knowing about it.

Harry Mead started to school but went to a circus instead without his parents knowing about it; he had never been to a circus before.

1. Was it wrong for Harry to play truant and go to a circus? Yes.... No....
2. Should Harry be punished for running away to go to a circus? Yes.... No....
3. Do you think this rule of the school is a good one? Yes.... No....

PART II

No. 1

The law of a certain city forbids the sale of farm seeds when they contain weed seeds.

Mr. Hansen had a quantity of wheat for which his neighbors offered him

\$2.00 per bu. This was twice the market price. This wheat contained the seeds of wild roses (weeds). Mr. Hansen refused to sell his wheat for seed and in so doing lost \$1.00 per bu.

1. Did Mr. Hansen do right in refusing to sell his wheat for seed? Yes.... No....
2. Do you think this weed law is a good one? Yes.... No....
3. Do you think Mr. Hansen was silly or foolish not to let his neighbors have his wheat for seed? Yes.... No....

No. 2

The law of a certain state requires that a boy shall be 16 years old before he may work in a factory.

John Hill is 14 years old but he is larger and stronger than most boys at 16 years of age. John's family have, for a long time, wanted to move into a cleaner part of town away from the noise and dirt. If John's father will say that John is 16 years old, he can earn \$5.00 per day working in a factory and the family can afford to live in a better home in a cleaner part of town; but the father refused to say that John was 16.

1. Was it right for John's father to refuse to say that his son was 16 years old? Yes.... No....
2. Do you think this child-labor law is a good one? Yes.... No....
3. Should the rest of the family respect the father for refusing to say that his son was 16? Yes.... No....

No. 3

It is against the law to shoot a deer in Minnesota except during a short season of two weeks in the fall, once in two years.

Carl Brown, a woodman, lived in northern Minnesota. Food became scarce in mid-winter and his family became ill, mainly because they had poor food and but little of it. Wild deer often came into his farm yards, but Mr. Brown always refused to shoot one, though his family needed food.

1. Was it right for Mr. Brown to refuse to shoot the deer? Yes.... No....
2. Is this law a good one? Yes.... No....
3. Do you respect Mr. Brown for not killing the deer to get food for his family? Yes.... No....

No. 4

A city in Iowa has a law against riding a bicycle on the sidewalks.

Joe Lane and four other boys were riding their bicycles one day in that city. These boys all knew what the law was but when they came to some rough pavement, four of them ran up on the sidewalk. Joe remained in the street. The other boys called him a "'fraid cat''.

1. Was it right for Joe to stay down on the pavement? Yes.... No....
2. Should cities have such laws? Yes.... No....
3. Do you think that Joe was a better citizen than the other boys? Yes.... No....

No. 5

We have a national law against transporting liquor (moving it from place to place).

"A", in his car, overtook his friend, "B", walking and carrying a heavy grip. "A" stopped and took "B" in his car. Before they had driven far, "A" discovered that "B" was transporting liquor in his grip. He stopped and made his friend get out with his grip and walk.

1. Did "A" do right to make his friend get out of the car? Yes.... No....
2. Do you think we need this liquor law? Yes.... No....
3. Would you like to have friends like "A"? Yes.... No....

No. 6

A night watchman saw a man break into a store. He surprised the burglar and arrested him. He then discovered that the man was his friend. The burglar had not had time to take anything so he begged the policeman to let him go and say nothing about it, saying he would never attempt to steal again; but the policeman took him to jail.

1. Did the policeman do right in taking the man to jail? Yes.... No....
2. Do we need a law against breaking into stores? Yes.... No....
3. Do you think this was a good policeman? Yes.... No....

No. 7

The prohibition law forbids making whiskey.

Abe Keel had always made whiskey and had been a "hard drinker" himself. After the prohibition law was passed he refused to make any kind of liquor. His friends begged him to make whiskey for them and promised to pay him a great deal of money but he refused.

1. Was it right for Mr. Keel to refuse to make whiskey for his friends? Yes.... No....
2. Is this prohibition law a good one? Yes.... No....
3. Do you respect Mr. Keel because of the way he did? Yes.... No....

No. 8

There is a law in one of our states against shooting wild game at night (between sundown and sunrise).

Mr. Kraft lived in that state and hunted a great deal. Toward evening he always watched the sun and the moment it sank out of sight, he unloaded his gun and started for home.

1. Do you think this daylight hunting law is a good law? Yes.... No....
2. If Mr. Kraft should see some fine wild game on his way home after sundown, would it be wrong for him to reload his gun and shoot it? Yes.... No....
3. If you were in his place would you unload your gun at sunset? Yes.... No....

No. 9

Several signs in a city park read: "Don't start a fire in this park without permission from the care-taker, FIVE DOLLARS FINE".

Mr. Jones and his family drove out to this park for a picnic dinner. They looked about for a while for the care-taker but could not see him so they built a fire to make coffee.

1. Do you think they did wrong? Yes.... No....
2. Is this a good park rule? Yes.... No....
3. Do you think Mr. Jones should be arrested and fined? Yes.... No....

No. 10

The public school has a rule against playing truant.

Willie Smith, who lives by the lake, likes to go fishing. One day some government men came to seine the lake and take out some of the big "rough fish". Many boys skipped school to see the big fish. They asked Willie to go with them. This made him feel very lonesome but he refused because, he said, he didn't want to be a truant.

1. Did Willie do right in refusing to go with the other boys? Yes.... No....
2. Do you think Willie Smith was a better boy than the boys who asked him to go with them? Yes.... No....
3. Should the school have rules against truancy? Yes.... No....
1. Have you ever been punished at home? (underscore right word) Yes, often; Seldom; Once only; Never.
2. How were you punished at home? By scolding; slapping; spanking; whipping; other ways.....;
3. Have you ever been punished at school? Yes, often; Seldom; Only once; Never.
4. How were you punished at school? Scolding; Slapping; Keeping in; Whipping; Other ways.....;
5. If you were a parent or a teacher how would you punish a child? (underscore your choice of ways) Scolding; Take away playtime; No dinner; Send to bed early; Slapping; Whipping.

APPENDIX B

REASONS FOR SOME OF OUR LAWS

No. 1

The daylight hunting law is enforced in northern Minnesota where twilight and dawn are long. Deer are often shot with high-power rifles from a distance of one-half mile.

There is danger of mistaking calves, pigs, colts, and people for deer at that distance unless the day is clear. People and stock are killed every hunting season by mistake. Also many tame chickens and turkeys are shot for wild game in the stubble in the early morning. There has not been so much of this done since the daylight hunting law was passed.

No. 2

It looks as if all our deer and other wild life will be destroyed. In order to save the deer in their wild state for the pleasure of our boys and girls, laws against killing them have been passed; but some people always try to find excuses for killing the deer. One excuse is that they need food.

No. 3

It is against the law to move liquor from place to place in the United States. Two or three people could be in a car and one of them have charge of liquor; if they were caught, they could each deny ownership and knowledge of it and thus escape punishment. To avoid this difficulty, all are now made responsible even though they claim not to know that liquor was in the car.

No. 4

Heat from a fire may damage or destroy nearby trees. Also, many times a fire will get away and run for miles through a forest destroying life and property. In parks, caretakers are usually appointed to show people where it is safe for them to build fires.

No. 5

The noise, dust, and steady grind of work in a factory is trying on health, especially the health of children; they need variety in work and plenty of sunshine and fresh air. Often the large overgrown boys and girls will break down first. It takes age to give endurance and resistance to dust and bad air.

No. 6

Before the law requiring fruit plants to be inspected was passed, nursery men were selling diseased plants to fruit growers and farmers. They could not grow nice fruit and most of the plants would soon die. Since this law came nursery men sell only healthy plants and now we should have nice fruit and plenty of it.

APPENDIX C

LETTER TO LAWYERS

Institute of Character Research
University of Iowa, Iowa City

April 12, 1929

My dear Sir:

You have been selected as one of fifty "A.V." lawyers of this state to assist in an investigation of the attitude of typical American children toward law. There has been a great deal of pessimistic speculation as to the trend of our so-called revolting youth.

The inclosed test will be given to about two thousand school children in grades four to twelve inclusive. Twenty laws have been selected that are more or less related to the child's field of interest.

The very important part you can play in this investigation is to tell us what is the desirable attitude toward obedience to law when the situations are as here presented.

If you will run through the test and answer the questions, your answers will indicate the attitude you think is desirable in each case. We shall consider the attitude thus expressed by these fifty leading lawyers of the state to be the best attitude we know and therefore the correct one.

You will thus greatly aid us by setting a standard by which we may score the children's papers.

By comparing the scores made by two thousand pupils in the nine different grade levels, we should be able to discover whether improvement or the opposite takes place in the attitude toward law while the children are in school and in what grade the change is most marked.

We hope it will please you to coöperate with us in this study. If you desire us to do so, we shall be glad to report to you later the outstanding results of the investigation.

Kindly return the test as soon as possible and greatly oblige us.

Very truly yours,

Institute of Character Research
By E. G. Lockhart

APPENDIX D

OTIS SELF-ADMINISTERING TESTS OF MENTAL ABILITY

By Arthur S. Otis, Ph.D.

Formerly Development Specialist with Advisory Board,
General Staff, United States War Department

INTERMEDIATE EXAMINATION: FORM A

For Grades 4-9

20

Score.....

Read this page. Do what it tells you to do.

Do not open this paper, or turn it over, until you are told to do so. Fill these blanks, giving your name, age, birthday, etc. Write plainly.

Name.....Age last birthday.....years

First name, initial, and last name

Birthday.....Teacher.....Date.....192.....

Month Day

Grade.....School.....City.....

This is a test to see how well you can think. It contains questions of different kinds. Here is a sample question already answered correctly. Notice how the question is answered:

Sample: Which one of the five words below tells what an apple is?

1 flower, 2 tree, 3 vegetable, 4 fruit, 5 animal.....(4)

The right answer, of course, is "fruit"; so the word "fruit" is underlined. And the word "fruit" is No. 4; so a figure 4 is placed in the parentheses at the end of the dotted line. This is the way you are to answer the questions.

Try this sample question yourself. Do not write the answer; just draw a line under it and then put its number in the parentheses:

Sample: Which one of the five things below is round?

1 a book, 2 a brick, 3 a ball, 4 a house, 5 a box.....()

The answer, of course, is "a ball"; so you should have drawn a line under the words "a ball" and put a figure 3 in the parentheses. Try this one:

Sample: A foot is to a man and a paw is to a cat the same as a hoof is to a — what?

1 dog, 2 horse, 3 shoe, 4 blacksmith, 5 saddle.....()

The answer, of course, is "horse"; so you should have drawn a line under the word "horse" and put a figure 2 in the parentheses. Try this one:

Sample: At four cents each, how many cents will 6 pencils cost?.....()

The answer, of course, is 24, and there is nothing to underline; so just put the 24 in the parentheses.

If the answer to any question is a number or a letter, put the number or

letter in the parentheses without underlining anything. Make all letters like printed capitals.

The test contains 75 questions. You are not expected to be able to answer all of them, but do the best you can. You will be allowed half an hour after the examiner tells you to begin. Try to get as many right as possible. Be careful not to go so fast that you make mistakes. Do not spend too much time on any one question. No questions about the test will be answered by the examiner after the test begins. Lay your pencil down.

Do not turn this page until you are told to begin.

Published by World Book Company, Yonkers-on-Hudson, New York, and 2126 Prairie Avenue, Chicago.

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Examination begins here.

1. Which one of the five things below does not belong with the others?
(Do not write on these dotted lines.)
1 potato, 2 turnip, 3 carrot, 4 stone, 5 onion.....()
2. Which one of the five words below tells best what a saw is?
1 something, 2 tool, 3 furniture, 4 wood, 5 machine.....()
3. Which one of the five words below means the opposite of west?
1 north, 2 south, 3 east, 4 equator, 5 sunset.....()
4. A hat is to a head and a glove is to a hand the same as a shoe is to what?
1 leather, 2 a foot, 3 a shoestring, 4 walk, 5 a toe.....()
5. A child who knows he is guilty of doing wrong should feel (?)
1 bad, 2 sick, 3 better, 4 afraid, 5 ashamed.....()
6. Which one of the five things below is the smallest?
1 twig, 2 limb, 3 bud, 4 tree, 5 branch.....()
7. Which one of the five things below is most like these three: cup, plate, saucer?
1 fork, 2 table, 3 eat, 4 bowl, 5 spoon.....()
8. Which of the five words below means the opposite of strong?
1 man, 2 weak, 3 small, 4 short, 5 thin.....()
9. A finger is to a hand the same as a toe is to what?
1 foot, 2 toenail, 3 heel, 4 shoe, 5 knee.....()
10. Which word means the opposite of sorrow?
1 sickness, 2 health, 3 good, 4 joy, 5 pride.....()
11. Which one of the ten numbers below is the smallest? (Tell by letter.)
A 6084, B 5160, C 4342, D 6521, E 9703, F 4296,
G 7475, H 2657, J 8839, K 3918.....()
12. Which word means the opposite of pretty?
1 good, 2 ugly, 3 bad, 4 crooked, 5 nice.....()
13. Do what this mixed-up sentence tells you to do.
number Write the the in 5 parentheses.....()
14. If we believe some one has committed a crime, but we are not sure, we have a (?)
1 fear, 2 suspicion, 3 wonder, 4 confidence, 5 doubtful....()

15. A book is to an author as a statue is to (?)
1 sculptor, 2 marble, 3 model, 4 magazine, 5 man.....()
16. Which is the most important reason that words in the dictionary are arranged alphabetically?
1 That is the easiest way to arrange them. 2 It puts the shortest words first. 3 It enables us to find any word quickly. 4 It is merely a custom. 5 It makes the printing easier.....()
17. Which one of the five things below is most like these three: plum, apricot, apple?
1 tree, 2 seed, 3 peach, 4 juice, 5 ripe.....()
18. At 4 cents each, how many pencils can be bought for 36 cents?.....()
19. If a person walking in a quiet place suddenly hears a loud sound, he is likely to be (?)
1 stopped, 2 struck, 3 startled, 4 made deaf, 5 angered....()
20. A boy is to a man as a (?) is to a sheep.
1 wool, 2 lamb, 3 goat, 4 shepherd, 5 dog.....()
21. One number is wrong in the following series. What should that number be? (Just write the correct number in the parentheses.)
1 6 2 6 3 6 4 6 5 6 7 6.....()
22. Which of the five things below is most like these three: horse, pigeon, cricket?
1 stall, 2 saddle, 3 eat, 4 goat, 5 chirp.....()
23. If the words below were rearranged to make a good sentence, with what letter would the last word of the sentence begin? (Make the letter like a printed capital.)
nuts from squirrels trees the gather.....()
24. A man who betrays his country is called a (?)
1 thief, 2 traitor, 3 enemy, 4 coward, 5 slacker.....()
25. Food is to the body as (?) is to an engine.
1 wheels, 2 fuel, 3 smoke, 4 motion, 5 fire.....()
26. Which tells best just what a pitcher is?
1 a vessel from which to pour liquid, 2 something to hold milk,
3 It has a handle, 4 It goes on the table, 5 It is easily broken ()
Do not stop. Go on with the next page.
27. If George is older than Frank, and Frank is older than James, then George is (?) James.
1 older than, 2 younger than, 3 just as old as, 4 (cannot say which)()
28. Count each 7 below that has a 5 next after it. Tell how many 7's you count.
7 5 3 0 9 7 3 7 8 5 7 4 2 1 7 5
7 3 2 4 7 0 9 3 7 5 5 7 2 3 5 7
7 5 4 7.....()
29. If the words below were rearranged to make a good sentence, with what letter would the last word of the sentence begin? (Make the letter like a printed capital.)
leather shoes usually made are of.....()

30. An electric light is to a candle as a motorcycle is to (?)
1 bicycle, 2 automobile, 3 wheels, 4 speed, 5 police.....()
31. Which one of the words below would come first in the dictionary?
1 march, 2 ocean, 3 horse, 4 paint, 5 elbow, 6 night,
7 flown()
32. The daughter of my mother's brother is my (?)
1 sister, 2 niece, 3 cousin, 4 aunt, 5 granddaughter.....()
33. One number is wrong in the following series. What should that number be?
3 4 5 4 3 4 5 4 3 5.....()
34. Which of the five things below is most like these three: boat, horse, train?
1 sail, 2 row, 3 motorcycle, 4 move, 5 track.....()
35. If Paul is taller than Herbert and Paul is shorter than Robert, then Robert is (?) Herbert.
1 taller than, 2 shorter than, 3 just as tall as, 4 (cannot say which)()
36. What is the most important reason that we use clocks?
1 to wake us up in the morning, 2 to regulate our daily lives,
3 to help us catch trains, 4 so that children will get to school on time, 5 They are ornamental.....()
37. A coin made by an individual and meant to look like one made by the government is called (?)
1 duplicate, 2 counterfeit, 3 imitation, 4 forgery, 5 libel....()
38. A wire is to electricity as (?) is to gas.
1 a flame, 2 a spark, 3 hot, 4 a pipe, 5 a stove.....()
39. If the following words were arranged in order, with what letter would the middle word begin?
Yard Inch Mile Foot Rod.....()
40. One number is wrong in the following series. What should that number be?
5 10 15 20 25 29 35 40 45 50.....()
41. Which word means the opposite of truth?
1 cheat, 2 rob, 3 liar, 4 ignorance, 5 falsehood.....()
42. Order is to confusion as (?) is to war.
1 guns, 2 peace, 3 powder, 4 thunder, 5 army.....()
43. In a foreign language, good food = Bano Naab
good water = Heto Naab
The word that means **good** begins with what letter?.....()
44. The feeling of a man for his children is usually (?)
1 affection, 2 contempt, 3 joy, 4 pity, 5 reverence.....()
45. Which of the five things below is most like these three: stocking, flag, sail?
1 shoe, 2 ship, 3 staff, 4 towel, 5 wash.....()
46. A book is to information as (?) is to money.
1 paper, 2 dollars, 3 bank, 4 work, 5 gold.....()

47. If Harry is taller than William, and William is just as tall as Charles, then Charles is (?) Harry.
1 taller than, 2 shorter than, 3 just as tall as, 4 (cannot say which) ()
48. If the following words were arranged in order, with what letter would the middle word begin?
Six Ten Two Eight Four..... ()
49. If the words below were rearranged to make a good sentence, with what letter would the third word of the sentence begin? (Make the letter like a printed capital.)
men high the a wall built / stone..... ()
50. If the suffering of another makes us suffer also, we feel (?)
1 worse, 2 harmony, 3 sympathy, 4 love, 5 repelled..... ()
51. In a foreign language, grass = Moki
green grass = Moki Laap
The word that means **green** begins with what letter?..... ()
Do not stop. Go on with the next page.
52. If a man has walked west from his home 9 blocks and then walked east 4 blocks, how many blocks is he from his home?..... ()
53. A pitcher is to milk as (?) is to flowers.
1 stem, 2 leaves, 3 water, 4 vase, 5 roots..... ()
54. Do what this mixed-up sentence tells you to do.
sum three Write two the four and of..... ()
55. There is a saying, "Don't count your chickens before they are hatched." This means (?)
1 Don't hurry. 2 Don't be too sure of the future. 3 Haste makes waste. 4 Don't gamble..... ()
56. Which statement tells best just what a fork is?
1 a thing to carry food to the mouth, 2 It goes with a knife,
3 an instrument with prongs at the end, 4 It goes on the table,
5 It is made of silver..... ()
57. Wood is to a table as (?) is to a knife.
1 cutting, 2 chair, 3 fork, 4 steel, 5 handle..... ()
58. Do what this mixed-up sentence tells you to do.
sentence the letter Write last this in..... ()
59. Which one of the words below would come last in the dictionary?
1 alike, 2 admit, 3 amount, 4 across, 5 after, 6 amuse,
7 adult, 8 affect ()
60. There is a saying, "He that scatters thorns, let him go barefoot."
This means (?)
1 Let him who causes others discomforts bear them himself also.
2 Going barefoot toughens the feet. 3 People should pick up what they scatter. 4 Don't scatter things around..... ()
61. If the following words were arranged in order, with what letter would the middle word begin?
Plaster Frame Wallpaper Lath Foundation..... ()

62. In a foreign language, many boys = Boka Hepo
 many girls = Marti Hepo
 many boys and girls = Boka Ello Marti Hepo
 The word that means **and** begins with what letter?..... ()
63. A statement which expresses just the opposite of that which another statement expresses is said to be (?)
 1 lie, 2 contradiction, 3 falsehood, 4 correction,
 5 explanation ()
64. There is a saying, "Don't look a gift horse in the mouth." This means (?)
 1 It is not safe to look into the mouth of a horse. 2 Although you question the value of a gift, accept it graciously. 3 Don't accept a horse as a gift. 4 You cannot judge the age of a gift horse by his teeth..... ()
65. Which one of the words below would come last in the dictionary?
 1 hedge, 2 glory, 3 label, 4 green, 5 linen, 6 knife,
 7 honor ()
66. Which statement tells best just what a watch is?
 1 It ticks, 2 something to tell time, 3 a small, round object with a chain, 4 a vestpocket-sized time-keeping instrument, 5 something with a face and hands..... ()
67. Ice is to water as water is to what?
 1 land, 2 steam, 3 cold, 4 river, 5 thirst..... ()
68. Which statement tells best just what a window is?
 1 something to see through, 2 a glass door, 3 a frame with a glass in it, 4 a glass opening in the wall of a house, 5, a piece of glass surrounded by wood..... ()
69. Which of the five words below is most like these three: large, red, good?
 1 heavy, 2 size, 3 color, 4 apple, 5 very..... ()
70. Write the letter that follows the letter that comes next after M in the alphabet..... ()
71. One number is wrong in the following series. What should that number be?
 1 2 4 8 16 24 64..... ()
72. An uncle is to an aunt as a son is to a (?)
 1 brother, 2 daughter, 3 sister, 4 father, 5 girl..... ()
73. If I have a large box with 3 small boxes in it and 4 very small boxes in each of the small boxes, how many boxes are there in all? ()
74. One number is wrong in the following series. What should that number be?
 1 2 4 5 7 8 10 11 12 14..... ()
75. There is a saying, "Don't ride a free horse to death." This means (?)
 1 Don't be cruel. 2 Don't abuse a privilege. 3 Don't accept gifts. 4 Don't be reckless..... ()
- If you finish before the time is up, go back and make sure that every answer is right.

OTIS SELF-ADMINISTERING TESTS OF MENTAL ABILITY

By Arthur S. Otis

Formerly Development Specialist with Advisory Board,
General Staff, United States War Department

HIGHER EXAMINATION: FORM A

For High Schools and Colleges

20

Score.....

Read this page. Do what it tells you to do.

Do not open this paper, or turn it over, until you are told to do so. Fill these blanks, giving your name, age, birthday, etc. Write plainly.

Name.....Age last birthday.....years

First name, initial, and last name

Birthday.....Class.....Date.....192.....

Month Day

School or College.....City.....

This is a test to see how well you can think. It contains questions of different kinds. Here is a sample question already answered correctly. Notice how the question is answered:

Sample: Which one of the five words below tells what an apple is?

1 flower, 2 tree, 3 vegetable, 4 fruit, 5 animal.....(4)

The right answer, of course, is "fruit"; so the word "fruit" is underlined. And the word "fruit" is No. 4; so a figure 4 is placed in the parentheses at the end of the dotted line. This is the way you are to answer the questions.

Try this sample question yourself. Do not write the answer; just draw a line under it and then put its number in the parentheses:

Which one of the five words below means the opposite of north?

1 pole, 2 equator, 3 south, 4 east, 5 west.....()

The answer, of course, is "south"; so you should have drawn a line under the word "south" and put a figure 3 in the parentheses. Try this one:

A foot is to a man and a paw is to a cat the same as a hoof is to a — what?

1 dog, 2 horse, 3 shoe, 4 blacksmith, 5 saddle.....()

The answer, of course, is "horse"; so you should have drawn a line under the word "horse" and put a figure 2 in the parentheses. Try this one:

At four cents each, how many cents will 6 pencils cost?.....()

The answer, of course, is 24, and there is nothing to underline; so just put the 24 in the parentheses.

If the answer to any question is a number or a letter, put the number or letter in the parentheses without underlining anything. Make all letters like printed capitals.

The test contains 75 questions. You are not expected to be able to answer all of them, but do the best you can. You will be allowed half an hour after the examiner tells you to begin. Try to get as many right as possible. Be careful not to go so fast that you make mistakes. Do not spend too

much time on any one question. No questions about the test will be answered by the examiner after the test begins. Lay your pencil down.

Do not turn this page until you are told to begin.

Published by World Book Company, Yonkers-on-Hudson, New York, and 2126 Prairie Avenue, Chicago.

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Examination begins here.

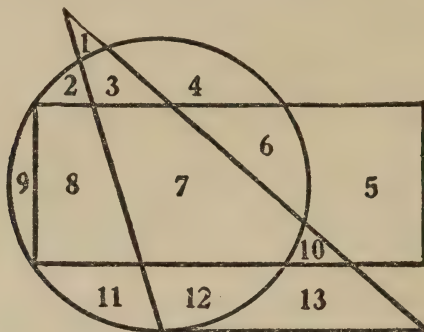
1. The opposite of hate is (?)
1 enemy, 2 fear, 3 love, 4 friend, 5 joy.....()
2. If 3 pencils cost 5 cents, how many pencils can be bought for 50 cents?()
3. A bird does not always have (?)
1 wings, 2 eyes, 3 feet, 4 a nest, 5 a bill.....()
4. The opposite of honor is (?)
1 glory, 2 disgrace, 3 cowardice, 4 fear, 5 defeat.....()
5. A fox most resembles a (?)
1 wolf, 2 goat, 3 pig, 4 tiger, 5 cat.....()
6. Quiet is related to sound in the same way that darkness is related to (?)
1 a cellar, 2 sunlight, 3 noise, 4 stillness, 5 loud.....()
7. A party consisted of a man and his wife, his two sons and their wives, and four children in each son's family. How many were there in the party?.....()
8. A tree always has (?)
1 leaves, 2 fruit, 3 buds, 4 roots, 5 a shadow.....()
9. The opposite of economical is (?)
1 cheap, 2 stingy, 3 extravagant, 4 value, 5 rich.....()
10. Silver is more costly than iron because it is (?)
1 heavier, 2 scarcer, 3 whiter, 4 harder, 5 prettier.....()
11. Which one of the six statements below tells the meaning of the following proverb "The early bird catches the worm.".....()
 1. Don't do the impossible.
 2. Weeping is bad for the eyes.
 3. Don't worry over troubles before they come.
 4. Early birds like worms best.
 5. Prompt persons often secure advantages over tardy ones.
 6. It is foolish to fret about things we can't help.
12. Which statement above tells the meaning of this proverb? "Don't cry over spilt milk.".....()
13. Which statement above explains this proverb? "Don't cross a bridge till you get to it.".....()
14. An electric light is related to a candle as an automobile is to (?)
1 a carriage, 2 electricity, 3 a tire, 4 speed, 5 glow.....()
15. If a boy can run at the rate of 6 feet in $\frac{1}{4}$ second, how many feet can he run in 10 seconds?.....()
16. A meal always involves (?)
1 a table, 2 dishes, 3 hunger, 4 food, 5 water.....()

17. Of the five words below, four are alike in a certain way. Which is the one not like these four?
1 bend, 2 shave, 3 chop, 4 whittle, 5 shear.....(1)
18. The opposite of never is (?)
1 often, 2 sometimes, 3 occasionally, 4 always, 5 frequently....(4)
19. A clock is related to time as a thermometer is to (?)
1 a watch, 2 warm, 3 a bulb, 4 mercury, 5 temperature....(5)
20. Which word makes the truest sentence? Men are (?) shorter than their wives.
1 always, 2 usually, 3 much, 4 rarely, 5 never.....(5)
21. One number is wrong in the following series. What should that number be?
1 4 2 5 3 6 4 7 5 9 6 9.....(3)
22. If the first two statements following are true, the third is (?)
All members of this club are Republicans. Smith is not a Republican. Smith is a member of this club.
1 true, 2 false, 3 not certain.....(3)
23. A contest always has (?)
1 an umpire, 2 opponents, 3 spectators, 4 applause, 5 victory....(2)
24. Which number in this series appears a second time nearest the beginning?
6 4 5 3 7 8 0 9 5 9 8 8 6 5 4
7 3 0 8 9 1.....(5)
25. The moon is related to the earth as the earth is to (?)
1 Mars, 2 the sun, 3 clouds, 4 stars, 5 the universe.....(2)
26. Which word makes the truest sentence? Fathers are (?) wiser than their sons.
1 always, 2 usually, 3 much, 4 rarely, 5 never.....(5)
27. The opposite of awkward is (?)
1 strong, 2 pretty, 3 short, 4 graceful, 5 swift.....(3)
28. A mother is always (?) than her daughter.
1 wiser, 2 taller, 3 stouter, 4 older, 5 more wrinkled....(2)
29. Which one of the six statements below tells the meaning of the following proverb? "The burnt child dreads the fire.".....(3)
1. Frivolity flourishes when authority is absent.
2. Unhappy experiences teach us to be careful.
3. A thing must be tried before we know its value.
4. A meal is judged by the dessert.
5. Small animals never play in the presence of large ones.
6. Children suffer more from heat than grown people.
30. Which statement above explains this proverb? "When the cat is away, the mice will play.".....(3)
31. Which statement above explains this proverb? "The proof of the pudding is in the eating.".....(3)
32. If the settlement of a difference is made by mutual concession, it is called a (?)
1 promise, 2 compromise, 3 injunction, 4 coercion,
5 restoration(2)

33. What is related to disease as carefulness is to accident?
1 doctor, 2 surgery, 3 medicine, 4 hospital, 5 sanitation.....()
34. Of the five things below, four are alike in a certain way. Which is the one not like these four?
1 smuggle, 2 steal, 3 bribe, 4 cheat, 5 sell.....()
35. If 10 boxes full of apples weigh 400 pounds, and each box when empty weighs 4 pounds, how many pounds do all the apples weigh?..()
36. The opposite of hope is (?)
1 faith, 2 misery, 3 sorrow, 4 despair, 5 hate.....()
37. If all the odd-numbered letters in the alphabet were crossed out, what would be the tenth letter not crossed out? Print it. Do not mark the alphabet.
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z.....()
38. What letter in the word "superfluous" is the same number in the word (counting from the beginning) as it is in the alphabet? Print it.....()
39. What people say about a person constitutes his (?)
1 character, 2 gossip, 3 reputation, 4 disposition, 5 personality()
40. If $2\frac{1}{2}$ yards of cloth cost 30 cents, how many cents will 10 yards cost?()
41. If the words below were arranged to make a good sentence, with what letter would the second word of the sentence begin? Make it like a printed capital.
same means big large the as.....()
42. If the first two statements following are true, the third is (?)
George is older than Frank. James is older than George. Frank is younger than James.
1 true, 2 false, 3 not certain.....()
43. Suppose the first and second letters in the word "constitutional" were interchanged, also the third and fourth letters, the fifth and sixth, etc. Print the letter that would then be the twelfth letter counting to the right.....()
44. One number is wrong in the following series. What should that number be?
0 1 3 6 10 15 21 28 34.....()
45. If $4\frac{1}{2}$ yards of cloth cost 90 cents, how many cents will $2\frac{1}{2}$ yards cost?()
46. A man's influence in a community should depend upon his (?)
1 wealth, 2 dignity, 3 wisdom, 4 ambition, 5 political power.....()
47. What is related to few as ordinary is to exceptional?
1 none, 2 some, 3 many, 4 less, 5 more.....()
48. The opposite of treacherous is (?)
1 friendly, 2 brave, 3 wise, 4 cowardly, 5 loyal.....()
49. Which one of the five words below is most unlike the other four?
1 good, 2 large, 3 red, 4 walk, 5 thick.....()

50. If the first two statements following are true, the third is (?)
Some of Brown's friends are Baptists. Some of Brown's friends
are dentists. Some of Brown's friends are Baptist dentists.
1 true, 2 false, 3 not certain.....(3)
51. How many of the following words can be made from the letters in
the word "largest," using any letter any number of times?
great, stagger, grasses, trestle, struggle, rattle, garage,
strangle()
52. The statement that the moon is made of green cheese is (?)
1 absurd, 2 misleading, 3 improbable, 4 unfair, 5 wicked.....(1)
Do not stop. Go on with the next page.
53. Of the five things following, four are alike in a certain way. Which
is the one not like these four?
1 tar, 2 snow, 3 soot, 4 ebony, 5 coal.....(2)
54. What is related to a cube in the same way in which a circle is
related to a square?
1 circumference, 2 sphere, 3 corners, 4 solid, 5 thickness..(2)
55. If the following words were seen on a wall by looking in a mirror
on an opposite wall, which word would appear exactly the same as
if seen directly?
1 Ohio, 2 Saw, 3 Noon, 4 Motor, 5 Otto.....(3)
56. If a strip of cloth 24 inches long will shrink to 22 inches when
washed, how many inches long will a 36-inch strip be after shrink-
ing?(4)
57. Which of the following is a trait of character?
1 personality, 2 esteem, 3 love, 4 generosity, 5 health....(4)
58. Find the two letters in the word "doing" which have just as many
letters between them in the word as in the alphabet. Print the one
of these letters that comes first in the alphabet.
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z..()
59. Revolution is related to evolution as flying is to (?)
1 birds, 2 whirling, 3 walking, 4 wings, 5 standing.....(2)
60. One number is wrong in the following series. What should that
number be?
1 3 9 27 81 108.....(2)
61. If Frank can ride a bicycle 30 feet while George runs 20 feet, how
many feet can Frank ride while George runs 30 feet?.....(4)
62. Count each N in this series that is followed by an O next to it if
the O is not followed by a T next to it. Tell how many N's you
count.
N O N T Q M N O T M O N O O N Q M N N O Q N O T
O N A M O N O M.....(4)
63. A man who is averse to change and progress is said to be (?)
1 democratic, 2 radical, 3 conservative, 4 anarchistic,
5 liberal()
64. Print the letter which is the fourth letter to the left of the letter
which is midway between O and S in the alphabet.....(P)

65. What number is in the space which is in the rectangle and in the triangle but not in the circle?.....()



66. What number is in the same geometrical figure or figures as the number 8?
67. How many spaces are there that are in any two but only two geometrical figures?
68. A surface is related to a line as a line is to (?)
1 solid, 2 plane, 3 curve, 4 point, 5 string.....
69. If the first two statements following are true, the third is (?)
One cannot become a good violinist without much practice.
Charles practices much on the violin. Charles will become a good violinist.
1 true, 2 false, 3 not certain.....
70. If the words below were arranged to make the best sentence, with what letter would the last word of the sentence end? Print the letter as a capital.
sincerity traits courtesy character of desirable and are....
71. A man who is influenced in making a decision by preconceived opinions is said to be (?)
1 influential, 2 prejudiced, 3 hypocritical, 4 decisive, 5 impartial
72. A hotel serves a mixture of 2 parts cream and 3 parts milk. How many pints of cream will it take to make 15 pints of the mixture?..
73. What is related to blood as physics is to motion?
1 temperature, 2 veins, 3 body, 4 physiology, 5 geography....
74. A statement the meaning of which is not definite is said to be (?)
1 erroneous, 2 doubtful, 3 ambiguous, 4 distorted, 5 hypothetical
75. If a wire 20 inches long is to be cut so that one piece is $\frac{2}{3}$ as long as the other piece, how many inches long must the shorter piece be?

APPENDIX E

SIMS SCORE CARD FOR SOCIO-ECONOMIC STATUS Form C

Published by the
PUBLIC SCHOOL PUBLISHING CO.
Bloomington, Illinois

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Printed in U. S. A.

Score.....

- 1 Name
- 2 Age..... Years and..... Months
- 3 Grade Date.....
- 4 Have you spent two years in any grade?..... If so, what grades?.....
- 5 Have you skipped any grades?..... If so, what grades?.....
- 6 Home address: City..... State.....
- 7 How many years have you lived in this town?.....
- 8 Have you attended schools in any other towns?..... If so, name them
- 9 Name of your School

Don't answer any of the questions below until you are told what to do.

If you have brothers or sisters in this school, write their names and grades on these lines:

Name Grade

Name Grade

In the following questions underline the correct answer:

- Are you a Boy? a Girl? (Underline correct answer)
- Are you living at home with your parents?.....Yes No
- Are you living in the home of someone else, such as a relative,
adopted parent, guardian, etc?.....Yes No
- Are you living in an institution, such as an orphan asylum or a
home for children?.....Yes No

Underline the Right Answer

1. Have you a telephone in your home?.....Yes No
2. Is your home heated by a furnace in the basement?.....Yes No
3. Do you have a bathroom that is used by your family alone?.....Yes No

4. Do you have a bank account in your own name?.....Yes No
5. Did your father go to college?.....Yes No
6. Did your mother go to college?.....Yes No
7. Did your father go to high school?.....Yes No
8. Did your mother go to high school?.....Yes No
9. Does your mother (or the lady of the home in which you live) regularly attend any lecture courses of which you know?.....Yes No
10. Do you have your own room in which to study?.....Yes No
11. Do you take private lessons in music?.....Yes No
12. Do you take private lessons in dancing?.....Yes No
13. Does your mother belong to any clubs or organizations of which you know?Yes No
If you know of any, write the name of one of them on this line (.....)
14. Do you belong to any organizations or clubs where you have to pay dues?.....Yes No
If you do, write the names of the organizations that you belong to on these lines (.....)
.....
.....)
15. Does your family attend concerts?
Never Occasionally Frequently
16. Where do you regularly spend your summers?
At Home Away From Home
17. How often do you have dental work done? (Underline only one)
Never When Needed Once a Year Oftener
18. How many servants, such as a cook, a housekeeper, a chauffeur, or a maid, do you have in your home?
None One Part Time One or More All the Time
19. Does your family own an auto which is not a truck?
None One Two or More
If your family does own an auto, write the make of the auto on this line (.....)
20. How many magazines are regularly taken in your home?
None One Two Three or More
If any are taken, write the names of three of them—or as many as are taken—on these lines (.....)
.....)
21. About how many books are in your home? (Be very careful with this one. A row of books three feet long would not have more than twenty-five books in it.)
None 1 to 25 26 to 125 126 to 500 More

22. How many rooms does your family occupy?
2 3 4 5 6 7 8 9 10 11 12 More

How many persons occupy these rooms?
2 3 4 5 6 7 8 9 10 11 12 More

23. Write your father's occupation on this line (.....)
Does he own Part All None of his business? (Underline)
Does he have any title, such as president, manager, foreman,
boss, etc.?Yes No
If he does have such a title, write it on this line (.....)
How many persons work for him? (Underline the right number)
None 1 to 5 5 to 10 More Than 10

Total Credits..... ÷ No. Answered..... = Score.....

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